IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appeal Brief

Application No.	Filing Date	First Named Inventor
10/587,890	07/31/2006	Feng Lin
Examiner	Art Unit	
SUNIL CHACKO	2625	

For
INTERNET PRINTING

Commissioner For Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

The appellant requests that the attached Appeal Brief of the above patent application be entered. Form PTO-2038 of $270 is enclosed for brief fee.

As the brief is filed by the appellant who is not represented by a registered practitioner, so the appellant chooses not to write the contents for **(v) Summary of claimed subject matter** and **(vi) Grounds of rejection to be reviewed on appeal** by adding the statement of "NONE" after their headings.

Appeal Brief

(i) Real party in interest

Feng Lin and Ling Su (Applicants)

(ii) Related appeals and interference

There are no related appeals and interferences.

(iii) Status of claims

Rejected Claims: 1-8

Cancelled Claims: 1-5

Claims Appealed: 6-8

(iv) Status of amendments

No amendment filed subsequent to final rejection.

(v) Summary of claimed subject matter

NONE

(the brief is filed by the appellant who is not represented by a registered practitioner.)

(vi) Grounds of rejection to be reviewed on appeal

NONE

(the brief is filed by the appellant who is not represented by a registered practitioner.)

Claim Rejections – 35 USC 103 in Final Office Action

Applicant studies all items (from Number 3 to 5) in Examiner's Response to Arguments of Final Office Action, and respectfully gives evidences against them.

Number 4 (first server does not store a print job)

Examiner writes "Qiao proxy server does not store the documents…", so it may be our first server.

Qiao describes the proxy server in FIG. 4 (column 4 line 3). And the proxy has "Converts a job sent from the ExPM clients 2-1 and 2-2 by IPP into the protocol (e.g. HTTP, FTP or other) of the ExPM servers 31 and 33, and transfers it to the ExPM servers 31 and 33. (column 6 line 39-42)"

Although Qiao proxy does not store whole documents at any moment, the proxy still transfers (i.e. bytes-to-bytes receive, store and forward) all data of whole documents. Hence Qiao proxy still temporarily stores print job during a period of time, and cannot become our first server, which never transfers, receives, sends or stores data of the documents.

In **advisory action**, Examiner says: "Though Applicant specification may claim that the server never transfer, receives, sends or stores data of the document, this is limitation is not in the recited in the claim." But applicant respectfully disagrees. In claim 6, applicant uses two types of server to separately store URL of the document and the data of the document. First server stores **URL** of the documents, and second servers store **data** of the documents, so that one first server can support printing documents in world-wide second servers without document content security concern. Lodwick spooling server and Qiao proxy receive, send or store data of the document, so they can't have the advantage of first server and can't be first server of claim 6.

Number 3 (Lodwick spooling server doesn't know print jobs in Qiao's proxy server.)

We can prove that combining Lodwick in view of Qiao is **impossible in technology**, and lead to printing fail.

In Number 4, Examiner writes "Qiao proxy server does not store the documents". As Qiao documents are not stored in server, so Qiao URL will point to no documents when printers access the URL, and printing will fail.

For example, Qiao proxy receives a print job request, and it transfers the job to a printer (column 6 line 39-42), thus Qiao proxy does not store the document. Now even if the proxy may create a URL for the print job during the job is transferred via the proxy server as Examiner's suggestion.

After one hour late, when a user inputs a PIN in a printer which sends it to Lodwick server, and the server somehow gets above mentioned URL of the print job. As the print job has been sent to some printer one hour ago, the job is not in the server now, and URL of the job is invalid now, so the printer will fail to get the document by the URL, and the user will print the document unsuccessfully.

As Qiao proxy cannot create URL that points to a valid document when printers access late, and the proxy never tries to publish URL for other servers to access, so we argue for Lodwick's spooling server doesn't know print jobs in Qiao's proxy server.

In **Advisory Action**, Examiner says "..., while the proxy server may not store the documents can still allow printing of the document because the proxy server can obtain the desired documents from the print server so that it can be printed." But applicant respectfully disagrees.

1. Qiao does not teach that his print server has the function of keeping printed documents long time in memory, and providing interface for printed document to be retrieved by servers later, in order to support the idea like Examiner's.

4

2. For one skilled in the art, the printer or print server is an output device, and has no object of keeping printed documents long time in memory, and providing interface for printed document to be retrieved by servers later.

3. As the common sense, a printer or print server is a private printing device, is inside the Local Area Network (LAN), and is protected by firewall, so that one skilled in the art never thinks of making printers to be storage to be retrieved from outside LAN. Both Lodwick and Qiao do not teach to make their printers to be retrieved outside LAN.

Number 5 (Lodwick has no need for first server)

In the **advisory action**, Examiner says: "... column 1 lines 62-66 and column 2 lines 1-5 ... The addition of this feature does not lessen the security as the applicant argues because the access is only provided by the request of the owner or administrator of the server."

Applicant respectfully disagrees. If the access of proxy is only from the request of **the owner or administrator (people?) of the server**, as Examiner says,

1. the proxy cannot become first or second server of claim 6, which is accessed by world-wide printers, instead of just the owner or administrator of the server.

2. lodwick printer has to just access to spooling server, and then spooling server accesses to proxy server. But in claim 6, printer separately accesses to both first server and second server.

Qiao's column 1 lines 62-66, and column 2 lines 1-5 talk about firewall issue, which cannot lead to a special proxy with the functions of first server without breaking Lodwick's design of "pull and security" (see below explanation).

Lodwick designs spooling server 50 to use PIN/job number to provide print job to printer 100 securely (column 9 line 1-5, column 14 line 19-34, column 6 line 44-46). As print jobs already are stored in spooling server that can directly provide print jobs to the printer securely, so in Lodwick system, there is not a need that a first server to redirect printer to other server for the job.

Proxy generally has several benefits. But, inserting a proxy into Lodwick system *in the way of Examiner's suggestion* will cause *pushing* data or URL to the printer, which breaks Lodwick objects for security and poll technology:

Security is achieved by the fact that the printer 120 is *not passively accepting any and all connections from the outside (Examiner lets printer accept connection for URL/Email from the outside)*. (column 6 line 42-46).

The printer polling device 100 is initiating connections to a specific, trusted location, the spooling server 50 (column 6 line 42-46). That is, Lodwick requires printer connect to one or at the most limited amount of trusted location only. (*Examiner lets Lodwick printer connect to any world-wide third-part servers, i.e. our second servers, for documents in order to become our design.*)

The printer polling device uses "*pull*" technology (Examiner uses "*push*") which polls the spooling server so that the spooling server does not have to initiate a connection into a printer. (column 5 line 51-60).

These prior art methods comprise what is typically referred to as "*push*" technology (i.e. technology in which a print job is directed to a specific known destination or printer) (column 1 line 64-67).

..., prior art *push* data flow techniques, which could compromise a local area network's security, are avoided (column 6 line 1-3).

As to Claim 6

Examiner says: "first retrieve means for sending said inputted number via Internet to a first server, which translates said number into the information of receiving a document (Lodwick teaches a keypad that is used for inputting a PIN to select a particular print job, see column 4 line 7-13. The PIN can be used to access a print job from the server, see column 4 lines 7-10.)" [from a second server via Internet and **sends said information to said printer**, and for receiving said information;] (Contents inside [ ] are part of first retrieve means of claim 6, and are not quoted by Examiner.)

Based on Examiner's comments on PIN and referring to Lodwick column 4 lines 7-13, applicant notices following differences:

Lodwick's spooling server	first server of claim 6
retrieves print job by PIN, Examiner: The PIN can be used to access a **print job** from the **server,** see column 4 line 7-13	Does not retrieve print job by PIN, but retrieves URL of print job by PIN
sends job to printer, see column 4 lines 7-10	sends URL of job to printer, see claim 6
NA	Printer sends another request to receive print job from other server by the URL, see claim 6

Examiner does not quote the remains of first retrieve means "from a second server via Internet and **sends said information to said printer**, and (first retrieve means) for receiving said information;" Examiner is aware of this, and says "Lodwick does not teach a <u>second server</u> (applicant thinks it should be the first server) that sends said information via the internet to said printer." And Examiner cites three quotations column 2 line 47-58, column 3 lines 28-36, and column 1 lines 62-66 to support that Qiao teaches this.

In "**sends said information to said printer**", "said information" is the URL of printer job or PIN, and "said printer" is the printer which sends out the PIN. But three quotations from Examiner just teach how to send print job, instead of URL of print job.

Contents of column 2 line 47-58 describe how to send print job from client computer to print server protected by firewall.

Contents of column 3 lines 28-36 describe how proxy unit and print server to make connection to send print job.

Contents of column 1 lines 62-66 with FIG 39 describe how client execute a print job to printer under a firewall.

From above analysis we know that Qiao does not teach how first server "sends said information to said printer".

Any possible way to build claim 6 from Lodwick in view of Qiao

In advisory action, Examiner says "...column 7 lines 13-22..., Lodwick teaches print jobs maybe be stored on spooling server according to the PIN, see column 4 lines 14-20. It would have been obvious to one skilled in art to include the pin feature with Qiao second server so that the use could access documents from the print server so that it can be printed"

Now we study any possible way of using Lodwick spooling server and Qiao proxy to build claim 6.

1. Assuming spooling server = first server, proxy server = second server

    (1) printer sends PIN to spooling server

    (2) spooling server translates PIN to URL (but Qiao doesn't teach to publish URL of print job to a server, see above Number 3)

    (3) spooling server sends URL to printer (Lodwick doesn't teach this)

    (4) printer gets print job from proxy server (impossible, see above Number 3)

8

Or,

       (1) printer sends PIN to spooling server

       (2) spooling server translates PIN to URL (where is print job, in proxy (below 5.1) or spooling server (5.2))

       (3) spooling server sends URL to proxy

       (4) proxy sends URL to printer (break Lodwick design, see Number 5)

       (5.1) printer gets print job from proxy server (impossible, see Number 3), or

       (5.2) printer gets print job from spooling server (let steps (3) and (4) have no meaning, see Number 5)
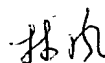

2. Assuming proxy server = first server, spooling server = second server

       Qiao proxy server does not translate PIN to URL.

Our conclusion

Lodwick in view of Qiao cannot lead to claim 6, including first server, its function, communication method and object.

<div align="right">

Respectfully submitted,

[signature]

Feng Lin (Appellant)
November 19, 2010
</div>

LIN, FENG
BLK 110, #12-120
Woodlands Street 13
Republic of Singapore, 730110

Claims appendix

Claim 6 : A network printer connected to a network for printing a document in the Internet by a user, comprising:

a keypad unit for inputting a number from the user;

first retrieve means for sending said inputted number via Internet to a first server, which translates said number into the information of receiving a document from a second server via Internet and sends said information to said printer, and for receiving said information;

second retrieve means for, according to said received information, retrieving said document from said second server via Internet;

print means for printing said received document.

Claim 7: The network printer as claimed in claim 6, said information of receiving a document from a second server via Internet is at URL format.

Claim 8: The network printer as claimed in claim 6, wherein said information of receiving a document from a second server via Internet further includes the title of said document, and said network printer further comprising:

a display unit for displaying the title of said document, and prompting the user for confirmation before printing said document.

Evidence appendix

NONE

Related proceedings appendix

NONE